

REMARKS

Following entry of the foregoing amendment, Claims 39-44 remain pending. Claims 45-56 have been withdrawn from consideration in response to the election previously made to the invention of Claims 39-44.

I. Objections to the Drawings

In the Office Action, the drawings were objected to under 37 C.F.R. §1.83(a) because the drawings allegedly do not show every feature of the invention specified in the claims. In particular, it is noted in the Office Action that the feature of “a slope of a response curve of change” in Claims 40 and 43 must be shown or the features canceled from the claims.

Applicants respectfully submit that the feature of “a slope of a response curve of change” is shown in at least Figure 2 by the element identified with reference numeral 228, wherein the step of calculating a slope of the damper response curve is recited. The slope of the responsive curve is subsequently utilized in steps 230-238. Accordingly, since this feature is shown in at least Figure 2 of the drawings, Applicants respectfully submit the drawings are in conformity with the requirements of 37 C.F.R. §1.83(a).

II. Claim Rejection Under 35 U.S.C. § 102

In the Office Action, Claims 39-43 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,450,999 to Scholten et al. In the Office Action it is stated that Scholten et al. discloses a variable air volume environmental management system comprising a controlled device (damper) that can be actuated to change the control variable; a sensor 18/32 for measuring the control variable; a micro controller 10 configured for executing computer

executable instructions; receiving a measurement from the sensor 18/32 actuating the controlled device (damper).

Scholten is directed to a variable air volume management system that integrates a fuzzy logic control system to control the operation of a damper actuator motor. In particular, Scholten teaches the use of fuzzy logic to determine whether or not a control output is required, and if it is required, how large the correction should be. The fuzzy logic of Scholten is based upon the current temperature and flow readings, as evidenced by Figures 2 and 6 and the accompanying text of the patent.

In contrast, the present invention is directed to a variable air volume temperature control system that determines the sensitivity of the controlled device (e.g., a damper) and then actuates the controlled device based at least in part on the determined sensitivity. For example, in the illustrative embodiment the change in air flow in response to damper movement is tracked to determine the sensitivity (e.g., a slope) of the damper. This information is then used to determine if subsequent damper movement is required based upon the current measured temperature value and the set point temperature. Scholten does not teach or suggest “determining the sensitivity of the controlled device” nor “actuating the controlled device based at least in part on . . . the sensitivity of the controlled device to predict an amount of actual actuation necessary,” as recited in independent Claim 39 and 42. Scholten’s teaching is directed to the use of fuzzy logic to control the actuation of a controlled device, and does not teach or suggest the use of the sensitivity of the controlled device.

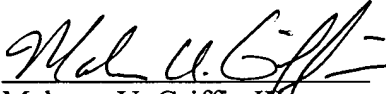
Accordingly, Applicants respectfully submit that the independent Claims 39 and 42 are patentable over Scholten in that Scholten fails to teach or suggest each and every limitation of

said claims. Likewise, dependent Claims 40-41 and 43-44 are allowable as a matter of law as depending from an allowable independent claim notwithstanding their own recitation of patentable subject matter.

CONCLUSIONS

The Applicants believe they have responded to each matter raised by the Examiner. Allowance of the claims is respectfully solicited. Any questions may be directed to the undersigned at 404.853.8233. It is not believed that fees for addition of claims are required beyond those that may otherwise be provided for in documents accompanying this paper. However, any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 19-5029.

Respectfully submitted,


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